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EXAMINER

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Paper No. 11

Application Number: 09/176,639

Filing Date: October 20, 1998

Appellant(s): SCHEDIWY ET AL.

Malcom Wittenberg  
For Appellant

**EXAMINER'S ANSWER**

This is in response to appellant's brief on appeal filed June 18, 2001.

**(1) Real Party in Interest**

A statement identifying the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

A statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief.

**(3) Status of Claims**

The statement of the status of the claims contained in the brief is substantially correct.

The rejection of claims 4-5, 7 and 11 is withdrawn. Claims 4-5, 7-11 are objected to in that they are deemed to be allowable if written in independent form.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

No amendment after final has been filed.

**(5) Summary of Invention**

The summary of invention contained in the brief is correct.

**(6) Issues**

The appellant's statement of the issues in the brief is substantially correct. The changes are as follows:

Claims 1, 2, 6, and 12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Grabner et al.

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Claim 3 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Grabner et al. in view of Friend et al. (U.S. Patent No. 5,455,901).

**(7) *Grouping of Claims***

Appellant's brief includes a statement that claims 1-12 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

**(8) *ClaimsAppealed***

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(9) *Prior Art of Record***

4,731,694	GRABNER et al.	3-1988
5,455,901	FRIEND et al.	10-1995
5,502,461	OKAMOTO et al.	3-1996

**(10) *Grounds of Rejection***

The following ground(s) of rejection are applicable to the appealed claims:

Claims 1-3, 6 and 12 are rejected under 35 U.S.C. 103 (a). as shown below.

**DETAILED ACTION**  
***Claim Rejections - 35 USC § 103***

I. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 1, 2, 6, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabner et al (U.S. 4, 731,694).

As to independent claim 1, Grabner et al disclose a touch pad module comprising sensor, insulative and conductive layers as shown in Col. 3, lines 20-22, 31-61 and Col. 4, lines 26-30. Grabner et al discuss where the sensor layer is Fig. 1, items 7 and 8, and where the insulative layer is Fig. 1, item 24. In a special embodiment of the touch pad, the insulative layer 24 also comprises a metalized layer as a conductor on upper flat surface. It would have been obvious that this extra layer shows the three layers of the touch pad with the sensor layer on the bottom, the insulative layer on top of the sensor layer and the conductive layer on top of the insulative layer. This order could be advantageous as to have better touch detection.

As to dependent claim 2, claim 1 and further comprising where the sensor layer comprises a capacitive touch pad comprising rows of electrodes as shown by Grabner et al in Fig. 1, items 14, 15 and a dielectric layer Fig. 1, item 6 and is discussed in Col. 3, lines 31-42.

As to dependent claim 6, claim 1 and further comprising where the conductive layer is transparent. Grabner et al disclose different materials used in the touch pad as shown in Col. 4, lines 15-29, and where a plastic covering, Fig. 1, item 24, is present . It would have been obvious to one skilled in the art that different types of materials with different properties could be used.

As to dependent claim 12, claim 1 and further comprising where a bezel is located over the conductive layer to prevent contact of that portion of the touch panel. Although Grabner et al do not disclose this feature, it would have been obvious to one skilled in the art that this feature could have been easily incorporated into the system. The bezel would enable certain areas of the touch panel, such as the edges of the sensors, to be off limits to the user.

III. Claim 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Grabner et al as view of Friend et al (U.S. 5,455,901).

As to dependent claim 3, claim 2 and further comprising where the conductive object comprises either a finger of a user or a stylus. Where Grabner et al fail to disclose the conductive object, Friend et al disclose in Col. 5, lines 28-34. It would have been obvious to one skilled in the art that this feature of a stylus could have been easily incorporated into the Grabner et al system as it would have been needed as a means for input for the user.

*Allowable Subject Matter*

IV. Claims 4-5, 7-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record does not disclose a touch pad where the electronic device can analyze capacitive measurements to determine the difference between a finger or a stylus, and where the conductive layer is of a resistance as to expand a small contact area of a tip of conductive stylus into an image of suitable size for position measurement, and where the conductive layer comprises a sheet of plastic embedded with conductive carbon.

*(II) Response to Argument*

[ The arguments to claims 4-5, 7 and 11 are moot. The rejection of these claims have been withdrawn after considering Appellant's arguments. ]

Starting on page 11 of the arguments, Appellant states that Grabner et al disclose "a matrix of tactile sensors each with its own pressure sensitive resistor and capacitor" (page 11, lines 5-6), and that the "metalization of the reference is on a per sensor element basis with each element being one of a matrix" (page 11, lines 8-9). Appellant indicates that claim 1 of the invention "calls for a conductive coating which is contiguous over the entire sensor device

surface not just over one element of the sensor" (page 11, lines 9-11). Appellant appears to confuse the row electrodes of Grabner et al (20, 21 and 22) with the claimed "conductive layer". The sensor layer of Grabner et al includes the row electrodes (20-22) as well as substrates 7 (foil), 16-18 (spacers), 8 (dielectric) and column electrodes 14-15. It is the "special embodiment" (col. 4, lines 26-29) of Grabner et al with a metalized cover over plastic layer 24 which is the same as the claimed "conductive layer", for example, Fig. 7 shows conductive layer 25 over and contiguous with the insulative layer 24.

Appellant states "the present invention employs a topmost conductive coating not for the purpose of shielding, but instead as an active element of the sensing device", and that "it is used for the express purpose of determining the location of contact of a conductive object" (page 11, lines 15-18). Claim 1 of Appellant's invention, discloses a conductive layer positioned over and contiguous with said insulative layer, however, claim 1 does not claim the conductive coating is an active element nor is used for determining the location of contact of a conductive object.

Claim 1 is not written in means-plus-function language.

With respect to claim 6, as stated in the Final Office action dated December 5, 2000, Grabner et al states the plastic layer could be made up of many different materials. It is known to one skilled in the art that plastic can have the properties of transparency.

On page 12, last paragraph of the arguments, Appellant states that claim 11 is independent, however, claim 11 is dependent on claim 1. However, as to the arguments to claim 11, claim 11 further defines the conductive layer. After further consideration, Appellant's arguments are convincing and the rejection of claim 11 is withdrawn.

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As to the arguments to claim 12, (page 13), Appellant states in relation to the bezel, “the choice of the size of this cordoned off area is by no means arbitrary as it involves sacrificing active sensor area” (page 12, lines 6-7). First, claim 12 does not claim or hint at choosing the size of the cordoned off area. Claim 12 simply claims that the device has a bezel (preventing the conductive object from contacting the portion masked by the bezel is self evident). Second, as to adding a bezel, this is obvious given the device of Grabner et al, wherein, if there were no bezel, the various row and column electrodes 15, 16, 20, 21 and 22, would be exposed on the side of the touch panel. Further, bezels are inherent in all touch panels to protect the edge electronics and electrodes. Examiner does not know of a touch panel without a bezel.

With respect to claim 3, Grabner et al clearly teaches using a finger and Friend et al disclose a pen input stylus (Fig. 1 and 8, item 103).

As to the arguments to claims 4-5, 7 which define a “visible trail being created on the surface of the conductive layer” due to the conductive layer being “deformable” and after considering Appellant’s arguments, the rejection of claims 4-5, 7 obvious over Grabner et al in view of Friend et al are withdrawn.

For the above reasons, it is believed that the rejections should be sustained.

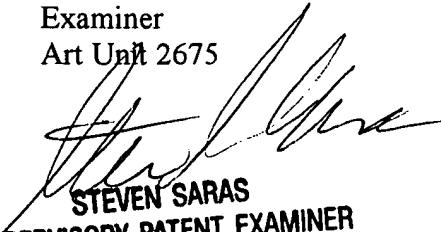
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Respectfully submitted,

Srilakshmi K. Kumar

Examiner

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